Appendix C
Correlated PM_{10} Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds[1] and PM_{10} concentrations at select monitoring sites within the Salton Sea Air Basin on May 11, 2014. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

FIGURE C-1
NILAND PM_{10} CONCENTRATION & WIND SPEED

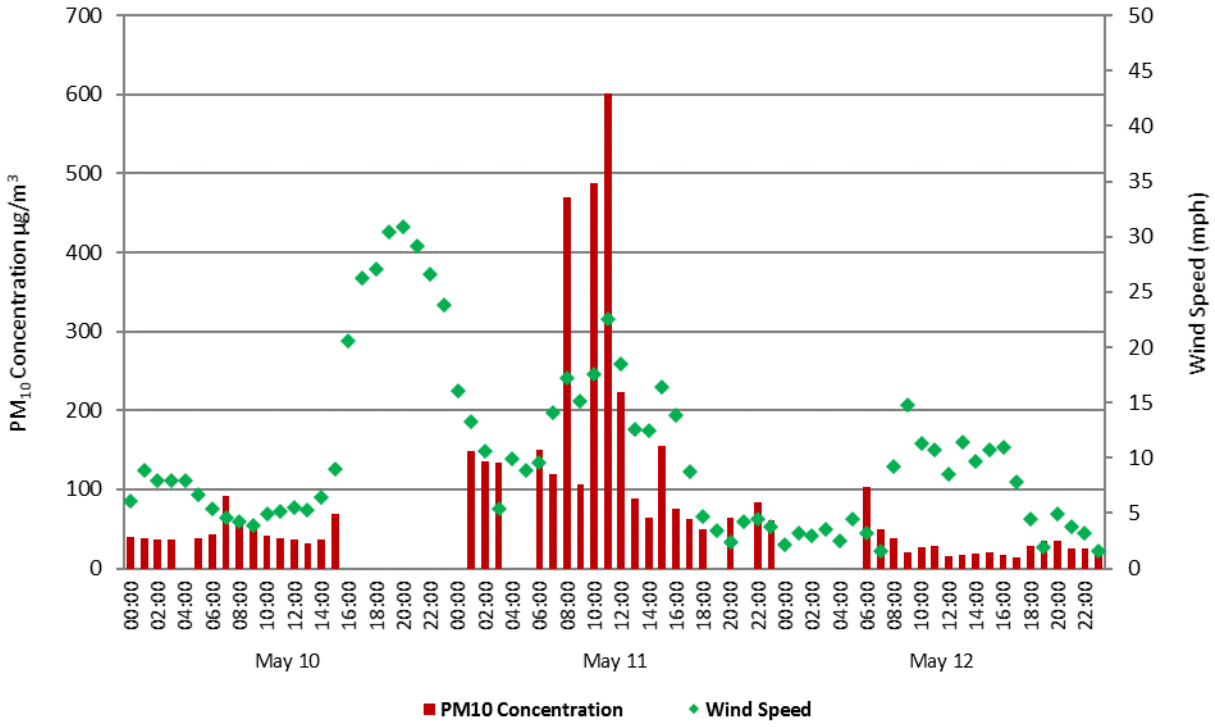

Fig C-1: Niland wind speed increase significantly during May 10, 2014, then experienced another increase on May 11, 2014. Greatest hourly PM_{10} concentrations were during this time. Air quality and wind data from the EPA's AQS data bank

[1] National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); http://w1.weather.gov/glossary/index.php?letter=w]

FIGURE C-2
NILAND PM_{10} CONCENTRATION & WIND SPEED

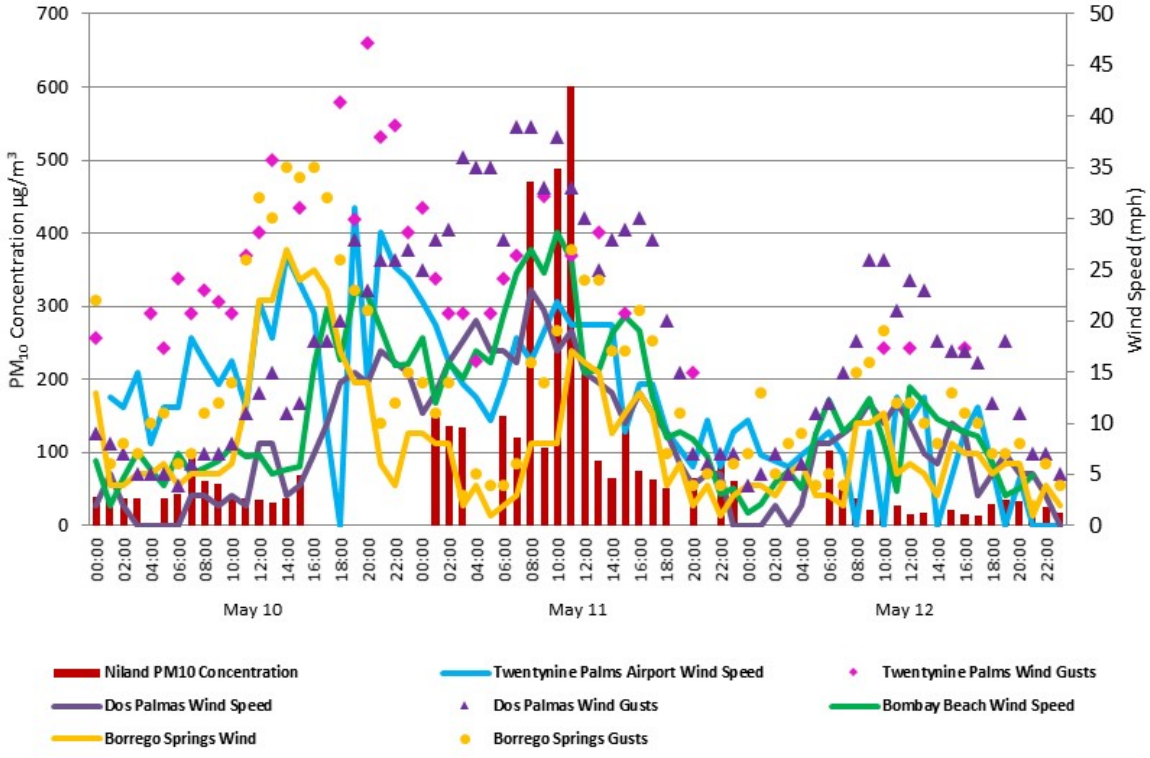

Fig C-2: Niland PM_{10} concentrations are paired with upstream wind sites on May 10, 2014 and May 11, 2014. Borrego Springs was an upstream site on May 10, 2014; the others were upstream sites on May 11, 2014. This was due to the shifting wind direction over the two-day period. Air quality data from the EPA's AQS data bank. Wind data from the NCEI'S QCLCD data bank, the University of Utah's Mesowest data bank, and the California Air Resources Board's AQMIS2 data bank

FIGURE C-3
BRAWLEY PM_{10} CONCENTRATION & WIND SPEED

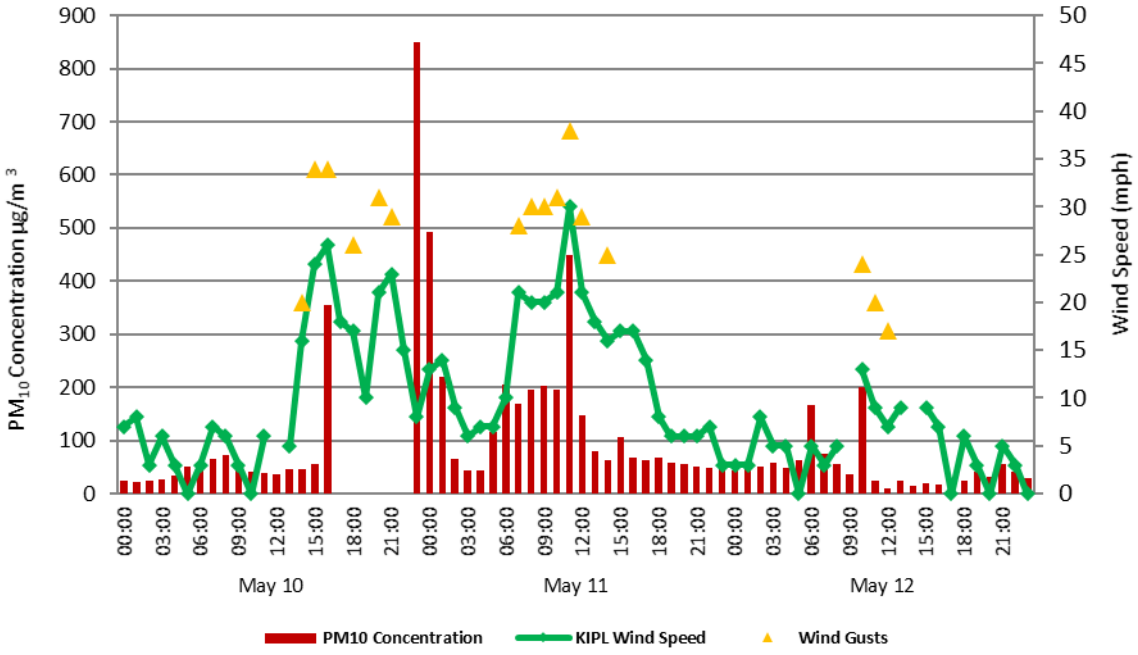

Fig C-3: Brawley site recorded increased levels of PM_{10} shortly after wind speeds increased on May 11, 2014. Air quality data is from the EPA'S AQS data bank. Wind data is from Imperial County Airport, the closest airfield to Brawley

FIGURE C-4
BOMBAY BEACH PM_{10} CONCENTRATION & WIND SPEED

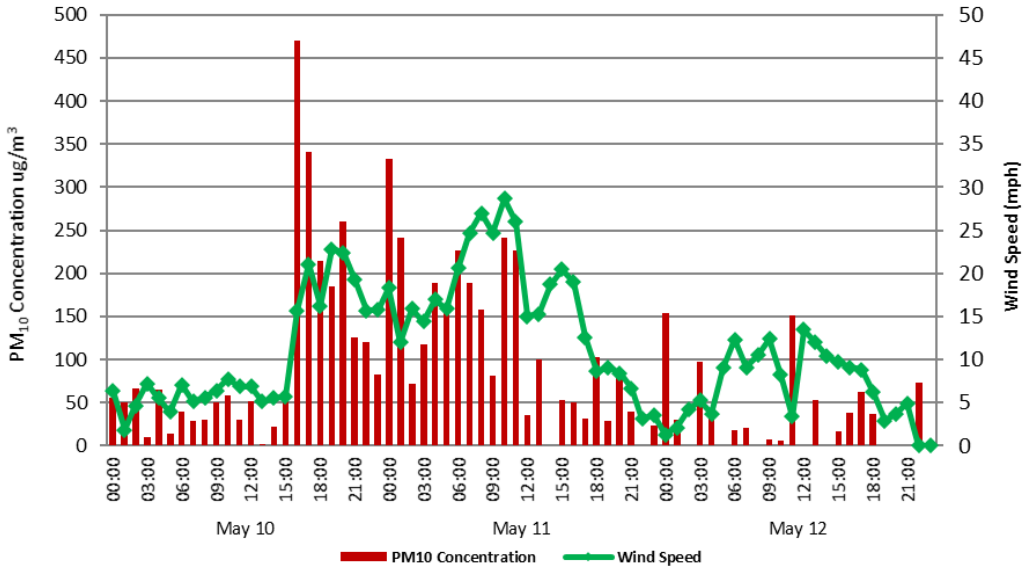

Fig C-4: Bombay Beach NW of Niland experienced increased PM_{10} concentrations following increased wind speeds on May 10, 2014 and May 11, 2014. Air quality and wind data from the California Air Resources Board's AQMIS2 data bank

FIGURE C-5
SONO BONO PM_{10} CONCENTRATION & WIND SPEED

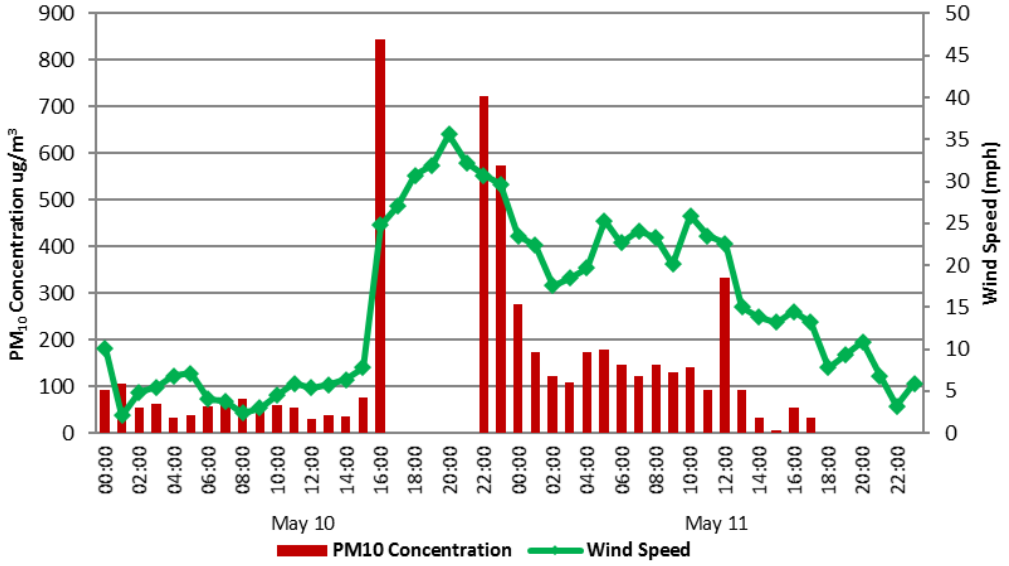

Fig C-5: Sonny Bono WSW of Niland recorded increased PM_{10} concentrations following increased wind speeds on May 10, 2014 and at the 12:00 hour on May 11, 2014. The site also experienced its peak hourly PM_{10} concentration on May 11, 2014 shortly after Niland recorded its greatest 24-hour concentration. There was no data for May 12, 2014. Air quality and wind data from the California Air Resources Board's AQMIS2 data bank

RIVERSIDE COUNTY MONITORING SITES

FIGURE C-6
INDIO (JACKSON ST) PM_{10} CONCENTRATION & WIND SPEED

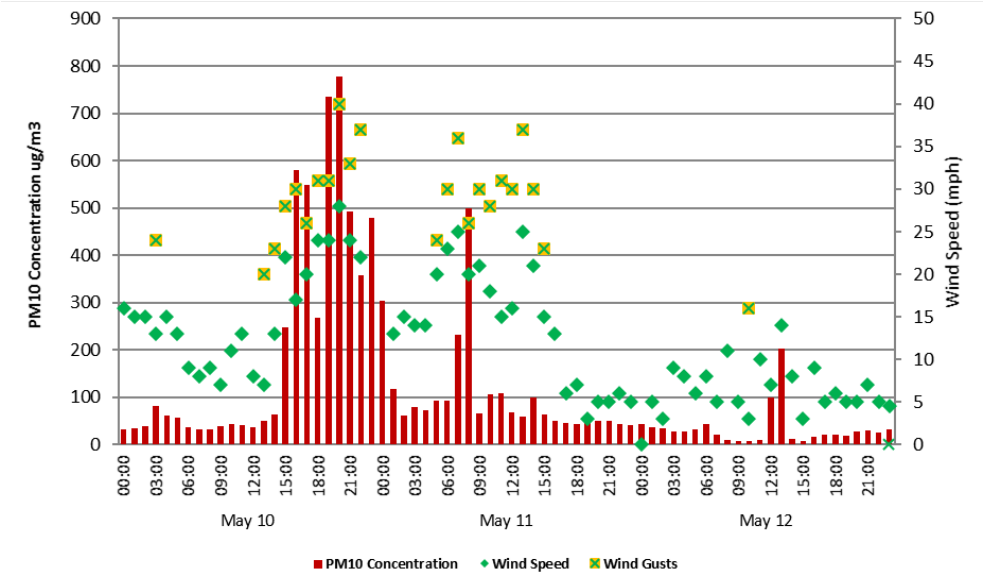

Fig C-6: Indio (Jackson St) recorded greater concentrations of PM_{10} following increased wind speeds. Wind data is from Jacqueline Cochran Regional Airport (KTRM)

FIGURE C-7
PALM SPRINGS FIRE STATION PM_{10} CONCENTRATION & WIND SPEED

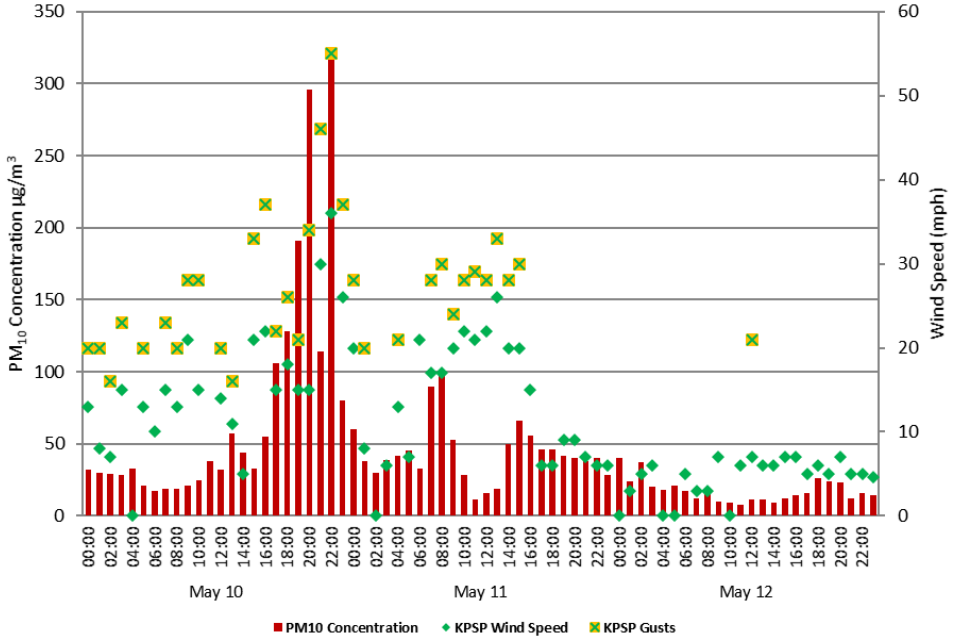

Fig C-7: Palm Springs Fire Station experienced high winds and gusts that elevated PM_{10} concentrations on May 10, 2014 and May 11, 2014. Air quality data from the EPA's AQS data bank. Wind data from the University of Utah's MesoWest data bank

FIGURE C-8
TORRES-MARTINEZ TRIBAL PM_{10} CONCENTRATION & WIND SPEED

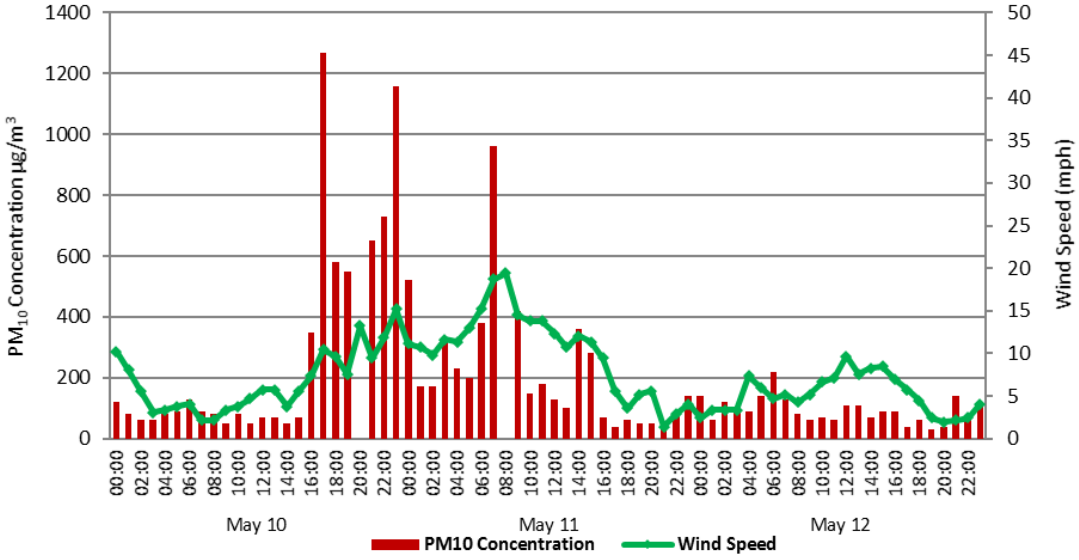

Fig C-8: Torres-Martinez Tribal site experienced both elevated winds and PM_{10} concentrations on May 11, 2014 and May 12, 2014. Air quality and wind data from the EPA's AQS data bank

YUMA, ARIZONA MONITORING SITE

FIGURE C-9
YUMA, ARIZONA SUPERSITE PM_{10} CONCENTRATION & WIND SPEED

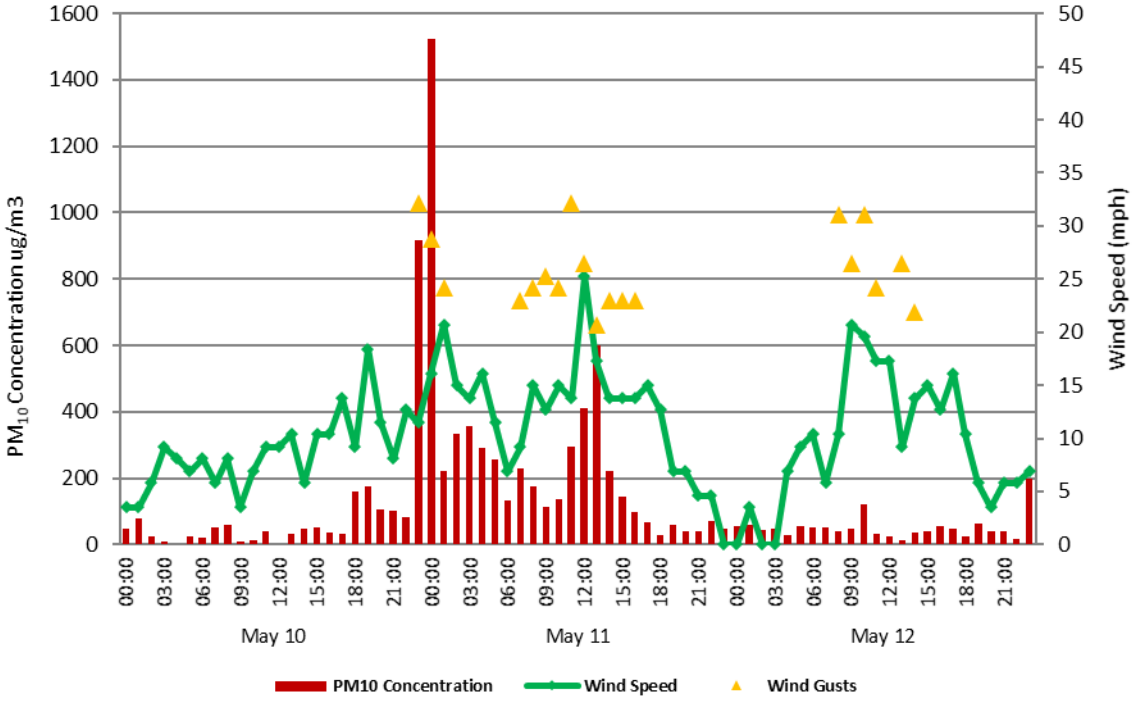

Fig C-9: The Yuma monitoring site in Yuma, Arizona, located in southwestern Arizona, saw corresponding increases in particulate matter as wind speed increased on May 10, 2014 and May 12, 2014. It demonstrates the regional impact of the wind event on May 10, 2014 and May 11, 2014. Air quality data from the EPA's AQS data bank. Wind data from the University of Utah's MesoWest data bank